

Letter to the Editor

A recent letter (Saxenmeyer, *Environ. Health Perspect.* 37:202) concerned the safety of nuclear waste disposal, which is a very real and important problem. The comments here should not be construed to indicate that I favor all types of nuclear waste disposal, but to indicate that despite the high intentions in the letter, it appeared to be below EHP standards and portions were inappropriate.

First, many of the points and comparisons made were weak or illogical. The lifetime of a motor or engine, for example, doesn't provide information about the stability of geologic formations. Why must we settle for a disposal process lasting up to 200 years, or none at all, and how is 200 years arrived at? There is no possibility of extrapolating in all details to future time from a "critical analysis of the age of the earth."

Second, even if the earth were only 100 years old, we would already know about massive earthquakes, volcanism, flooding and such. It is the calibration of time that varies, not the absolute number of years. Using the premise of a 6000-year-old earth doesn't affect our knowledge of earth and atmospheric

instabilities any more than does a 4.5 billion-year-old earth.

And third, at least in this instance it was inappropriate for ENVIRONMENTAL HEALTH PERSPECTIVES to be a vehicle for unnecessary controversy concerning age of the earth. There is already a field that could just as well be called "scientific creationism" if the term "creationism" hadn't obtained the connotation it has. Most of the physical and biological data do not support anything near a literal, 6000 year history of earth based upon the Gregorian improvements of the Julian calendar used in most of the western world.

Confusion stems from insufficient information and from semantics. Science doesn't operate to validate previous beliefs but to learn, eventually, what is closest to coherence over a large variety of frameworks, truths as closely as these can be approached. The scientific bases of geologic principles, age of the earth and evolution are broad and substantial. Out-right disregard or improper distortions tend to reduce the clarity and credibility of the positions taken.

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